

The Take Home Car Advantage

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Problem Statement

During my nearly 14 years with the Conway Police Department, (CPD), I have seen a number of officers come and go, both good and bad. One of the primary reasons I believe that we lose officers to surrounding agencies is not the necessarily the pay, but the advantage of having a take home vehicle. We lose many officers annually, most of them to Horry County Police. This agency provides all of their officers with take home vehicles. Horry County police starting pay is less than ours and we have had officers take a pay cut to go to this agency. To that end, officers are willing to absorb a reduction in pay, sometimes substantial as in the case of a former CPD Detective, for the advantage of a take home car.

Currently the Conway Police Department consists of 61 officers and civilian staffers that provide 24/7, around the clock protection to nearly 20,000 residents of the city. The Department offers a full array of services, to include crime prevention, criminal investigations, front line patrol, K-9, and accident investigations. The city has grown exponentially in the past 14 years, however, the department has failed to keep pace with the overall growth of the city as a whole. When fully staffed, the department consists of 55 class one officers, however, the department is only maintaining a fleet of approximately 33 vehicles.

The problem with the department's fleet management approach is not a new one. The department has always "hot seated" vehicles. Hot seating is when the vehicle is constantly utilized 24 hours a day, 7 days a week. The supervisor would assign the officer a vehicle at the beginning of shift, requiring the oncoming officer to wait at the station for the on duty officer to complete his shift and transfer his personal equipment before the vehicle was ready for the on-coming officer to begin his tour of duty. To possibly drive a different vehicle each time he/she reported to work increased the likelihood that he/she would be placed in a vehicle that had a different setup, since there was not a policy governing

the type, placement and installation of equipment inside the vehicle. An officer would not be familiar with the vehicle set up and that could lead to issues such as accidents. This was how the vehicle assignments worked when I first came to work at the police department.

Since that time some progress has been made, with officers being assigned to share a vehicle. This is a step forward from the "hot seating" because the vehicles do have downtime between shifts, all be it minimal, and still some of the same issues with assigned shared vehicles arise as with the hot seated vehicles. There are days when an officer(s) still has to wait for the shared vehicle and officer operating it to return to the station before gear can be switched so that the oncoming officer is ready for patrol. There are other issues with the assigned shared vehicle scenario as well. For example when officers have to come in for extra duty assignments, or there is a large scale emergency, like the recent flooding, when more officers than your usual daily shift are called in for duty. In those cases the officer's assigned vehicle may not be available so they end up in someone else's assigned vehicle creating confusion and frustration for the officer. The department has a few "spare" vehicles, but they are rarely available when needed due to their ongoing daily use. Currently there are not even enough vehicles for every detective to have one while they are working without having to locate another officer's vehicle. The citizens of Conway deserve to have a department equipped to handle any situations that may arise and able to respond in a timely manner. A take home car program would help make that prospect a reality.

Contrary to the current belief, there is a cost effective solution for the department to provide every officer with a take home vehicle. All the data shows the benefits of this program. The department has gone from hot seating vehicles to assigned shared vehicles, and the next logical step to move forward is to take home/assigned vehicles. The data indicates that maintenance costs are lower on take home

vehicles, officers take more pride in their vehicles and take better care of them, which leads to less vehicle accidents with their patrol vehicles. The data will also show that take home/assigned vehicles stay on the road longer than shared vehicles, which leads to less down time and increased productivity. I believe that introducing the program at the department will not only bring more recruits applying for positions, but also help in keeping the officers we have and slow down the turnover rate. The data was collected from police departments across the country, from my own department, and from several other local departments that have the program already in place. They all show the undeniable benefits to implementing a take home car program that will far out way the initial startup costs that the department may face with the program, and it does not have to be implemented all at once. The program can be started over a period of years to break up the initial costs of purchasing a large amount of vehicles. Not only would the Conway Police Department and the officers benefit from the implementation of a take home vehicle program, but also the residents of the City of Conway. Benefits include seeing more police vehicles on the roads and parked within the neighborhoods, which creates a high visibility omni-presence and acts as a powerful deterrent of criminal activities.

Data Collection

There have been countless studies done at police departments across the country ranging from the largest of departments to the smallest of departments and all the data points to the same conclusion. Let's begin by examining data, and surveys obtained from the Conway Police Department, and compare them to a few other local South Carolina departments that currently have a take home vehicle program in use. The first step was to solicit input from officers at the department on a take home car program, and as one might imagine the results were very much in favor of implementing the program. A survey was conducted with all class one officers ranging from the Operations Captain to the newest patrol

officer. The goal of the survey was to get an idea from the department as a whole, their feelings about a take home car program, and to get a wide variety of opinions from officers from different command levels within the department. The surveys were emailed to each officer and consisted of the following questions:

1. How would a take home vehicle program impact the work of police services? List 3 positive things and 3 negative things.
2. The following question deals with officer perceptions of the program. Rate the below statements on a scale from 1 to 5: 1 being disagree to 5 being strongly agree
 - Reduced maintenance costs:
 - Decreased response times:
 - Increased officer morale:
 - Crime Deterrence:
 - Employee recruiting success:
 - Employee retention:
 - Crime Prevention:
 - Increased patrol:
3. Do you think a take home vehicle program can help to develop a better attitude towards work? Why?
4. Estimate how much time it takes during a two-week pay period to load/unload a vehicle, wait on a vehicle, or find a vehicle to use.
5. Would you like to see a take home vehicle program implemented? How would this program impact you personally?

We will examine the results of this survey along with data collected from the City Maintenance Facility which is responsible for the maintenance and repairs for all city vehicles, including the police department. We will also examine data I have collected from the Bluffton, North Myrtle Beach, and Georgetown Police Departments, which all have implemented a take home vehicle system. We will also examine some case studies selected from the internet regarding take home vehicle programs from around the country.

Data Analysis

First let's take a look at some studies that have been done across the country on take home vehicle programs that were completed by organizations such as the International Chiefs of Police, Fraternal Order of Police, and International City/County Management Association. One study was conducted that compared a fleet of 30 assigned vehicles to a pool of 34 shared vehicles. The study found that operating costs per mile were 30% lower for assigned rather than shared vehicles. Based on the study, shared vehicles had to be replaced every 20 to 26 months compared to an average of 60 months for a take home/assigned vehicle. They also discovered that on average a shared vehicle averaged \$8400 in damage a year when compared to an assigned/take home vehicles which only averaged \$1375 per year. The study also looked at the amount down time that officers experienced while waiting to either load/unload vehicles. It found that on an average it took between 28 to 40 minutes per day to check-out, load/unload their shared vehicle. On average the shared car was unavailable 5.6 days a month due to repairs, lost keys, etc. So now the officer would have to find a spare vehicle with average another 25 minutes of non-productive time. All this equals to approximately 13 non-productive days per year per officer. This was a study done at the City of Tacoma police department which in the end concluded that

the take home vehicle program saves the city around 1.4 million per year versus a shared vehicle operation. (International City/County management Association "Police Vehicle Take Home Study" 2008)

A study conducted at the Hampton Virginia Police Department indicated that both maintenance and operating costs were lower with take home vehicles versus shared vehicles. The maintenance cost of take home vehicles averaged \$0.16 per mile versus \$0.19 per mile on shared vehicles, which is a 16% savings. (International City/County management Association "Police Vehicle Take Home Study" 2008)

Mercury Associates did an extensive study on take home vehicle programs and came up with the same conclusions discussed above. The average replacement for a take home vehicle was every 7 years versus about 3 ½ years for a shared vehicle with, annual maintenance costs averaged \$7000 annually for shared vehicles versus \$3500 for take home vehicles. The average non-productive time for officers sharing vehicles was 40 minutes a day per officer which is equivalent to 7,300 hours a year for a department the size of the Conway Police Department. This study was done based on a 260 man department and concluded that a take home vehicle program would save the department of that size approximately \$21 million over a 20 year period. (Mercury Associates "Are Take Home Vehicle Programs for Police Officers Beneficial" 2013")

Each of these national studies indicates that not only are maintenance and operating costs lower with a take home vehicle program versus a shared vehicle program but there are also many other benefits. There are more police vehicles in neighborhoods, which makes residents feel safer and reduces crime. There is an increased visibility that gives the perception that more police are on the street. Officers will take better care of personal assigned vehicles and morale increases. It also makes it easier for management to hold individual officers accountable for misuse or neglect of the vehicle. There is a quicker response and better preparedness to emergency or critical situations, and officers tend to have

fewer accidents in take home vehicle versus shared vehicles because officers have a “sense of ownership” with that vehicle.

The studies also considered the disadvantages to a take home/assigned vehicle program and concluded that the benefits significantly outweighed the few disadvantages that were found. One of the obvious and most cited disadvantage is the initial startup costs of outfitting every officer with a fully equipped vehicle. We will discuss later ways in which initial start-up costs can be managed so as not to have a significant outlay of capital expenditures all at once. The other main disadvantage and perhaps the greatest to overcome is political. The program could give the city politicians or city manager powerful bargaining chip that many use shamelessly. They would expect a greater presence of police in neighborhoods if every officer is assigned their own vehicle. If the city is willing to make the investment then they would expect a higher return. They could always threaten to discontinue funding the program. It is always a possibility that a small group or minority of politicians, citizens, or both will complain about these benefits that are not being provided for other workers to enjoy. These issues can be overcome by providing independent verifiable, data that demonstrates the undeniable benefits of a take home vehicle program. Now let’s look at the data collected from several local departments, along with the Conway Police Department to see if the cost estimates and other benefits provided in the national studies are supported by the local departments selected for the survey.

I met with our City Maintenance Facility Supervisor to obtain maintenance data on our shared patrol vehicles. First I requested the maintenance records on several different vehicles to determine what maintenance costs were associated with each vehicle. I started with a 2010 Chevrolet Impala (P-85). This vehicle is shared between two patrol officers, and occasionally used by other officers when theirs may not be available. A review of the vehicle’s maintenance and repair record from the beginning of

2011 to present showed charges totaling \$7032.08. This vehicle was taken out of the normal patrol rotation after four (4) years of service and assigned to support personnel due to mileage and overall deterioration of the vehicle. The next vehicle I looked at was also a 2010 Chevrolet Impala (P-86), but assigned to two supervisors. A review of this vehicle's maintenance records from the beginning of 2011 to present, indicated the vehicle has had \$8,122.86 in maintenance and repair costs. This vehicle will be taken out of patrol rotation this year. The next vehicle, a 2010 Chevrolet Impala (P-84), is also shared by two (2) supervisors as well. Maintenance records indicated that from 2011 to present \$4567.13 has been spent on this vehicle. This vehicle is scheduled to be removed from the normal patrol rotation next year. A 2013 Chevrolet Impala (P-92), which is assigned to (2) two patrol corporals was also selected as part of the study. Since being put in service in March of 2013, it has had \$1656.76 in maintenance and repair work, and is still currently in service. I also selected a 2007 Chevrolet Impala (P-79), a take home vehicle that is assigned to the chief. Since 2011 this vehicle has only had \$2702.76 of maintenance work and repairs. This is significantly less than the three (3) 2010 models and slightly more than the 2013 model that was selected. These numbers may be a little skewed so let's look at some comparisons from take home patrol vehicles from other local departments.

I contacted the Town of Bluffton, which is a similar size city and department as Conway and has a take home vehicle program. Bluffton offers all of its officers take home vehicles as part of their employment. I spoke with Sergeant Sheldon Epstein, the Departments Fleet Manager regarding the average operational life of their take home vehicles and maintenance costs. Sergeant Epstein informed me that their average patrol vehicle lasts approximately 6-7 years in the normal patrol rotation and then is used another 1-2 years for miscellaneous duties(e.g. use such as transport vehicles or spares). In comparison our vehicles last an average of 4-5 years in the patrol normal rotation, a reduction of 29%-33% in the expected operational life of the vehicle. Sergeant Epstein retrieved the maintenance records

on several of their take home vehicles for me to compare with ours. The first being a 2011 Ford Crown Victoria. The maintenance and repair records indicated that for the date it was put into service to present, was only \$2509.33. The second vehicle was also a 2011 Ford Crown Victoria. Maintenance and repair records from the day it was put into service to present was \$3,230. A third vehicle, again a 2011 Ford Crown Victoria indicate similar maintenance and repair costs of \$2,344.40 from the date it was placed in service to the present. While different vehicle models, all are used for the same purpose and the much lower maintenance costs over the same time period is obvious. When comparing the highest operating cost of our P-86 with \$8112 verses Bluffton's 2011 Ford with the highest operating cost of \$3,230, a 60% increase operating costs. Sergeant Epstein also indicated on average that 6-7 new vehicle are purchased annually to keep the fleet current. At Conway we purchase about 5-6 vehicles a year, however, our fleet is not up to date and the majority of the vehicles in the fleet would be considered high mileage.

Bluffton was not the only other agency I met with. I also contacted North Myrtle Beach Public Safety who also provide all their officers with take home cars as long as they live within 12 miles of their headquarters. North Myrtle Beach is also a similar sized city in the way of area and number of officers as Conway. If a North Myrtle Beach Officer lives farther than the 12 mile requirement they are not provided with a take home vehicle, but they still have their own assigned vehicle. A review of their maintenance records using the same methodology on three (3) of their patrol vehicles also found similar operating and maintenance cost as in Bluffton. They include 2011 Ford Crown Victorias. Their maintenance and repair numbers for the three vehicles are \$3115.42, \$2792.25, and \$4573.79 respectfully for the same operational period. Once again cost analysis found substantially lower maintenance costs for the take home vehicles versus the shared vehicles. North Myrtle Beach also advised me that their average patrol vehicle lasts 6-7 years.

Finally I obtained information from the Georgetown Police Department. They are also a similar sized department that offers take home cars to their officers. I obtained information from three of their patrol vehicles. They did not have any 2011 vehicles so 2010 Ford Crown Victoria's were used to conduct a comparison of maintenance and repair records for the time the vehicles were put into service until the present. The first vehicle's maintenance and repair records were reviewed for a comparable time period and operational costs were \$4269.73. The second vehicle maintenance and repair records indicate similar operation costs of \$4249.97, as did vehicle with \$3213.75.

The comparisons from each department clearly indicates that the take home vehicles have an overall lower maintenance cost compared to shared vehicles. The cost analysis provided by the Bluffton Police Department indicated total expenditures of \$8083.73 for three (3) patrol vehicles during an approximate four year span, North Myrtle Beach's operational costs were \$ 10,481.46 for three (3) patrol vehicles for a similar timeframe, and Georgetown Police Department reported cost totaled \$11,733.45 for the three (3) patrol vehicles used in the survey. This compares to a total cumulative cost of \$19,722.07 in maintenance and operational costs for the three (3) shared patrol vehicles over the same period of time. When averaged the maintenance and repair costs of the three (3) departments with take home vehicles totals \$10,099.55, compared to \$19,722.07 for shared vehicles. This represents a 51.2% savings over a 4 year period on those three (3) vehicles. A further breakdown of the yearly maintenance cost per vehicle for take home vehicles was approximately \$841.63 compared to \$1643.51 for shared vehicles. Again translating into a 51.2% savings per vehicle, per year.

Saving money in maintenance costs is not the only benefit of a take home vehicle program. In analyzing the results from the survey that was distributed to the department's officers, it was determined that a take home vehicle program would be beneficial. Of the 22 surveys that were

completed and returned 21 out of 22 or 99% stated that they would like to see the program initiated. Fifteen out of twenty two officers, or 68.18%, reported that it would increase morale and possibly be a factor in remaining with the department. In the survey, 54.5% of the officers indicated that they would take better care of the vehicle, due to having a “sense of ownership” and pride. Also in the survey, 90.9% of officers thought that the program would be a helpful tool in recruiting and retention of employees, meaning less turn-over. In speaking with the Human Resource Director for the City of Conway, she advised that at least one (1) former employee indicated during an exit interview that one of the reasons for leaving was to have a take home car at another agency. Normally an officer will stay with a department approximately 2 years before he/she will be hired by another department. In researching the costs associated with hiring a new, non-certified officer (training, equipping and time) I found it to be approximately obtained \$100,000 over a two (2) year period. That equates to \$100,000 each time an experienced officer leaves the department. The only negative comments regarding a take home car program I found in my survey was the initial startup costs of providing every officer with a take home vehicle. However, when comparing the numbers in a cost analysis it is clear to see that the initial startup cost will more than offset in the long run by the efficiencies and increased productivity the program will produce.

Implementation Plan

Based on my research, there are two implementation paths for agencies considering moving forward with the take home vehicle program. The first option would be to “bite the bullet” and purchase the number of vehicles necessary to outfit each officer with their own vehicle. As already indicated the Conway Police Department currently maintains a fleet of 33 vehicles. To provide each officer with a take home vehicle, would require the purchasing of approximately 23 additional vehicles, less 2-3 spare

vehicles that would be needed and used when assigned vehicles are out of service for repairs. This approach would be extremely challenging from both a budgetary and political standpoint, due to capital outlay required in a single year's budget.

Option two involves implementing this program is over a period of time, perhaps over 3-5 years. Normally, when the department receives new vehicles, the same amount of old vehicles are taken off the road and sold and/or used for spares. This approach is more achievable and cost effective since the fleet can be increased incrementally without busting the budget and sacrificing other equipment purchases and employee compensation. For example if six (6) new vehicles are purchased in a given year the three (3) worst ones would be dead lined and the remaining three (3) would be kept and issued to the most senior officers. This would be repeated each year until the fleet was expanded sufficiently to eventually issue every officer a take home vehicle. Following this methodology, individual vehicle mileage and associated maintenance costs would decrease, while extending the operational life of the vehicle. Once the fleet numbers are stabilized, then the oldest vehicles would be rotated out of service and replaced by new ones. As in the case of North Myrtle Beach, guidelines and use and distance outside of the city must be factored into the decision making process on who will be assigned a take home vehicle. Regardless, complaints can be expected from the rank-in-file on any decisions, limitations or both that may be included in a take home vehicle policy.

No matter which option is chosen regarding the implementation of a take home vehicle program, the chief will be responsible for presenting the plan to both the City Administrator and City Council for approval. Since this is a budgetary matter and some degree of the costs involved, City Council would have to decide if they wish to commit the funding necessary for the program to be implemented as part of a long term investment in the police department.

Evaluation

Of course the only way to evaluate this program is to implement it and track all the costs that were identified and discussed in the study. It would take time to accurately evaluate all of the associated “hard” costs (e.g. insurance, fuel, tires, maintenance and repairs) over a number years, especially if the approach selected is to expand the fleet by adding a few take home vehicles each year.

Without question, the take home car program would take a significant investment by the City of Conway. However, I feel that the benefits of the program will far outweigh the initial costs of the program. Overall morale would be greatly increased, which leads to having more pride in their department, which in turn leads to more pride in the work that each officer does on a daily basis. A take home car gives officers a sense of ownership, which means they will take better care of their vehicles. This program not only benefits the officers at the department, but it also benefits every citizen of the City of Conway. There will be more marked patrol cars in the neighborhoods and on the streets, which leads to a sense of security and is a crime deterrent. It also means quicker response times, because non-productive “down time” waiting for another officer to return the vehicle and switching your gear out from your personal vehicle to the patrol car. In examining the data and looking at all the positives benefits, while weighing them against the few negatives, it is my opinion that implementing of this program should be seriously considered by City leadership and put into implementation at the earliest available opportunity.

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